



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 1  
1 CONGRESS STREET, SUITE 1100  
BOSTON, MASSACHUSETTS 02114-2023

OFFICE OF THE  
REGIONAL ADMINISTRATOR

July 6, 2009

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE, Room 1A  
Washington, DC 20426

RE: Downeast LNG Draft Environmental Impact Statement, Washington County, Maine  
(OPE/DG2E/Gas Branch 3 Downeast LNG, Inc. Downeast Pipeline, LLC. Docket Nos. CP07-52-000, CP07-53-000, CP07-53-001, FERC/EIS-0231D) CEQ # 20090164

Dear Secretary Bose:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (DEIS) for Downeast LNG, Inc.'s (Downeast) proposed Liquefied Natural Gas (LNG) terminal, pipeline and related facilities in Washington County, Maine.

The DEIS details the Downeast proposal to construct and operate an LNG terminal including a ship unloading facility, a total of 320,000 cubic meters of LNG storage in two tanks, vaporization equipment, and a 29.8 mile long sendout pipeline that would connect with the existing Maritimes and Northeast (M&NE) pipeline near Baileyville, Maine. LNG deliveries would arrive by ship at the marine terminal's 3,862-foot-long pier designed to handle vessels with up to 220,000 cubic meters of cargo capacity. The project does not require any dredging to accommodate the proposed LNG vessel traffic. An expansion of the M&NE system capacity will be necessary in order for the Downeast facility to be able to move the imported gas to market. The expansion would require approximately 233 miles of pipeline looping (to increase the volume of gas that can be transported in the system) and the construction of compressor stations that will impact approximately 1000 individual wetlands with total temporary construction impacts to wetlands estimated at 288 acres and permanent operational impacts to wetlands estimated at 73 acres. It is not clear from the discussion in the DEIS whether the pipeline capacity from the 233 miles of looping would be enough for Downeast plus Calais LNG and Quoddy Bay LNG; the two additional import terminals proposed for northern Maine, should they all come on line at some point in the future. It is important to note that according to the DEIS (page 1-2), "M&NE is not proposing to construct these downstream expansion facilities and does not have an application before the FERC."

EPA has reviewed the DEIS focusing on direct and indirect impacts of the proposal and with consideration for other existing sources of impact in the project area. The proposed project is located in a region of Maine with deep water access where, as noted above, there are currently

617-918-1010

Internet Address (URL) • <http://www.epa.gov/region1>

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 30% Postconsumer)

other proposals for LNG terminal development, including the Quoddy Bay and Calais projects. EPA's experience with other LNG projects both on and offshore in New England provided knowledge that helped shape our active participation in the Federal Energy Regulatory Commissions (FERC) prefilng process. As a cooperating agency during the preparation of the DEIS we offered detailed scoping comments in May of 2006 and three rounds of comments on interagency review drafts of FERC's Administrative Draft Environmental Impact Statement (ADEIS).

Our scoping comments called for a thorough consideration of alternatives, direct, indirect and cumulative environmental impacts from construction and operation of the facility on the aquatic resources of the terminal site and Passamaquoddy Bay and along the sendout pipeline. Our comments also addressed wetlands, air quality, environmental justice, marine organisms/marine mammals, specifically requested consideration of the various LNG proposals as alternatives to each other, and requested that the cumulative impacts analysis for each LNG project fully consider the impact of the other LNG projects, as well as impacts from other past, present and reasonably foreseeable future actions.

We recommended to FERC that the DEIS contain a discussion of how many LNG import facilities are needed in New England and whether or not other proposed projects in the US or Canada obviate the need for the Downeast project (or others). We continue to believe that this discussion is relevant and needs to occur. On this point, the DEIS states (page 4-405), "At this time, it is not possible to foresee which of these LNG projects would move forward and be constructed." In addition, in light of the fact that M&NE has not applied for a license for the pipeline expansion necessary for Downeast LNG to operate, it is crucial for FERC to address in the FEIS how a decision to license Downeast LNG can be made absent M&NE's expansion.

While a number of EPA's comments have been addressed in the DEIS, in several areas, as described more fully in the attachment to this letter, we note our disappointment that information relevant to the characterization of environmental impacts is not included. Instead there is a FERC recommendation that Downeast provide information prior to the close of the DEIS comment period. While we appreciate that FERC has requested the information as part of the NEPA analysis, in almost all instances we believe that the information should have been included in the DEIS and not made available for the first time in the FEIS. Examples of the additional information requested by FERC include (but are not limited to) horizontal directional drilling plans/contingency plans for the crossing of the St. Croix River; mitigation strategies to minimize acoustic harassment/harm to marine species; seasonal or construction timing restrictions to minimize impacts to marine species and habitats; characterization of greenhouse gas emissions from LNG and support vessels; and a cumulative air impacts analysis. In most of these instances we believe that a comprehensive response from Downeast will require close coordination with state and federal cooperating agencies and that that FERC would benefit from being part of that coordination. We believe that most if not all of the information gaps to be addressed by the FERC requests were previously requested by us and others during scoping and in our comments on the ADEIS documents. As such, we believe FERC should develop a mechanism to share the relevant information with the public and cooperating agencies in

advance of the FEIS and, depending upon the nature of the information provided, we reserve the right to supplement our comments on the DEIS in response to the new information.

The enclosure to this letter describes issues and questions related to a number of elements of the proposed project and the environmental analysis (as noted above) that we believe need to be addressed in the FEIS. We have rated the DEIS "EC-2" (Environmental Concerns-Insufficient Information) in accordance with EPA's national rating system, a description of which is enclosed. My staff is ready to continue to participate on the cooperating agency team to provide additional input, as necessary, to help FERC develop the FEIS for the project. Please feel free to contact me or Timothy Timmermann of the Office of Environmental Review at 617/918-1025 if you wish to discuss these comments further.

Sincerely,



Sara W. Leighton  
Acting Regional Administrator

Enclosure

## **Summary of Rating Definitions and Follow-up Action**

### **Environmental Impact of the Action**

#### **LO--Lack of Objections**

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### **EC--Environmental Concerns**

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

#### **EO--Environmental Objections**

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### **EU--Environmentally Unsatisfactory**

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

### **Adequacy of the Impact Statement**

#### **Category 1--Adequate**

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### **Category 2--Insufficient Information**

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

#### **Category 3--Inadequate**

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

## **Detailed Comments -- Downeast LNG DEIS**

### **Wetlands**

#### Alternatives

Additional information should be provided in the FEIS to support decision-making under Section 404 of the Clean Water Act. This would include sufficient information to demonstrate how the proposed LNG terminal site development work that will involve discharging dredged or fill material in wetlands or other waters of the United States will meet the requirements of EPA's regulations issued under Section 404 (b)(1) of the Clean Water Act, referred to as "EPA's 404 (b)(1) Guidelines" (40 CFR Part 230). The Guidelines require the following: that there be no less environmentally damaging practicable alternative to the proposed action; that the activity not cause or contribute to violations of state water quality standards or jeopardize endangered or threatened species; that the activity not cause or contribute to significant degradation of waters of the United States; and that all practicable and appropriate steps be taken to minimize potential adverse impacts to the aquatic ecosystem (Section 230.10 (a-d)). The analysis should allow for a comparison of impacts to the aquatic environment from the proposed development site and from the alternative LNG terminal sites that were eliminated from consideration in the EIS analysis.

The DEIS explains that the FERC analysis of alternatives included an evaluation as to whether alternate sites offered a "significant environmental advantage" over the Downeast proposed site. It is not clear how or if that evaluation considered the factors included under section 230.10 (a) of the 404 (b)(1) Guidelines to determine whether the project site qualifies as the least environmentally damaging practicable alternative (LEDPA).

#### Functions and Values

As we requested in our previous comments (scoping and ADEIS comments) the FEIS should contain a thorough discussion of the ecological functions and values of wetlands that would be impacted by the proposed project.

#### Vernal Pool Information

EPA's comments on the ADEIS requested that additional information regarding impacts to vernal pools be incorporated upon receipt of spring pool survey data. The DEIS provides reference to the surveys and a description of the results in sections 4.4.1.2 and 4.4.1.3. The DEIS describes the use of Horizontal Directional Drill (HDD) technology for all seventeen pools directly crossed by the pipeline. Table 4.4.1.3-1 (DEIS page 4-86) shows impacts in vernal pool buffer areas from the sendout pipeline which are in most cases under 10% of the buffer area. These measures are an appropriate way to reduce impacts. The analysis of impacts should also include a description of expected changes to vegetation in the buffer areas and a characterization of the values of specific pools, accompanied by a landscape setting map showing the pools in relation to one another and their relative landscape position (as a means to help assess pool value).

### Compensation and Mitigation Plan

The DEIS (page 4-85) notes that a final wetland mitigation plan should be filed with FERC prior to construction. We believe at a minimum a draft conceptual plan should be presented as part of the NEPA process and included in the FEIS (or provided earlier if possible) for interagency review and comment. The DEIS notes the Maine DEP wetland mitigation ratios but does not reference the 2008 COE/EPA compensatory mitigation rule which also applies to the project (Final Mitigation Rule for the Department of Defense, Department of the Army, Corps of Engineers, 33 CFR Parts 325 and 332; and U.S. Environmental Protection Agency, 40 CFR Part 230, Subpart J: Compensatory Mitigation for Losses of Aquatic Resources, effective June 8, 2008). EPA requests the opportunity to review the mitigation and compensation plan currently being developed and to be included in the consultation process on these issues.

### Pipeline Issues

- The comparison of the potential impacts of a co-located and/or shared (single sendout) pipeline infrastructure for the Downeast, Quoddy Bay, and Calais projects in the DEIS provides a good basis for understanding the potential for impact reduction from these options. While we recognize the complexity of the shared/co-located pipeline options described in the DEIS, we encourage FERC to work to develop an approach to the various LNG terminal proposals that would allow for this possibility to be revisited should the projects proceed on timelines that would accommodate such an approach.
- The discussion of 8.86 miles of shallow bedrock blasting (DEIS page 4-5) for the sendout pipeline should be expanded to explain whether and to what extent any of the blasting will occur in or otherwise impact wetlands or other aquatic resources.
- The DEIS calls for “Downeast to continue to consult with the COE and other appropriate state and federal resource agencies to develop site-specific HDD plans for each of the proposed HDD crossings, which include site-specific construction diagrams showing the location of mud pits, pipe assembly areas, and all areas to be disturbed or cleared for construction, and a contingency plan for crossing the feature in the event an HDD is unsuccessful. Downeast should file the HDD plans, and any agency comments on the plans, with the Secretary for review and written approval by the Director of OEP prior to the end of the draft EIS comment period.” While we applaud this call for coordination and note that we assume FERC seeks to obtain this information so that it can be presented in the FEIS, we believe it should have been presented in the DEIS. We would like to be part of the interagency coordination team working on these issues with FERC and Downeast, but to date we have not been contacted to do so and the DEIS represents the first notice we are aware of for coordination on this issue. We fully support intensive coordination on this issue, especially in the case of the proposed HDD crossing of the St. Croix River given the potential for substantial impacts to the river ecosystem should the HDD prove unfeasible/unsuccessful and other traditional construction techniques become necessary.

## **Groundwater Resources**

The DEIS contains a good discussion of the steps that will be taken to protect groundwater drinking sources including the use of pre- and post-blasting well tests. We recommend that the FEIS more fully describe remedial actions to restore wells in the case of damage during construction/operation of the project including contingency plans if well function cannot be restored. The DEIS (page 4-54) notes that FERC has reviewed the Downeast Spill Prevention, Control and Countermeasure Plan (SPCC) plan template and has found it to be adequate. EPA would appreciate the opportunity to review the SPCC plan. In addition, we would like to know whether the SPCC plan requires preconstruction notification of water suppliers along the construction route.

## **Cumulative Impacts**

### Marine Mammals

We question the dismissal of more geographically distant LNG facilities (Northeast Gateway LNG, Neptune LNG, Cacouna Energy LNG, Rabaska LNG) from the cumulative impact analysis in the DEIS based on the assumption that impacts are generally localized. For many resources, that is likely a valid assumption. However, whales, for example, have extensive migration ranges and the same animals that could be potentially affected by vessels from the Northeast Gateway and Neptune LNG projects may be affected by Downeast LNG operations. It was determined that the Northeast Gateway and Neptune LNG projects incrementally elevated the risk of vessel strikes for whales and other marine mammals. Additional impacts to whales through acoustic harassment or elevated risks of vessel strikes resulting from the Downeast LNG project need to be assessed in the context of the additional impacts that these animals are experiencing in busy shipping lanes along their entire migration route from the Caribbean to the Bay of Fundy.

### Fish

The analysis should consider the cumulative impact of entrainment and impingement associated with the Downeast LNG, Calais LNG and Quoddy Bay LNG projects together as these facilities would likely be impacting the same populations of fish.

## **Mitigation of Impacts to Marine Mammals**

The relevance of mitigation of impacts to marine mammals is linked to a statement on page ES-4 of the DEIS which reads, "We conclude that construction and operation of the proposed project is likely to adversely affect four threatened or endangered whales species, including the North Atlantic right, humpback, fin, and sei whales, given the frequency of species observations, the increased vessel traffic in the waterway, and the likelihood of acoustic harassment." The DEIS notes that Downeast will be required to comply with the NOAA Right Whale Ship Strike Reduction Strategy and that Downeast proposes "forward-watching" whale spotters on the LNG vessels. It is unclear how the system would work or how effective it would be. Our comments on the first ADEIS recommended that the DEIS address how the risk of ship strikes to marine

mammals can be reduced or mitigated, including a discussion of the installation of real time acoustic monitoring devices (such as those installed in Massachusetts Bay). Our comments on the 2<sup>nd</sup> ADEIS recommended that Downeast LNG's coordination with NOAA on mitigation measures to protect marine mammals be chronicled and summarized in the DEIS to the degree possible, not just provided to the FERC Secretary prior to construction. In response, the DEIS (page 4-148) states, "Downeast should continue to consult with NOAA Fisheries and other relevant federal and state agencies to determine appropriate mitigation strategies to employ during construction of the LNG terminal facility to minimize acoustic harassment or harm to marine species (fish, sea turtles, pinnipeds, and other marine mammals). Downeast should file with the Secretary copies of its correspondence with consulted agencies and a description of any mitigation measures it has agreed to implement prior to the end of the draft EIS comment period." A similar recommendation to provide information prior to the end of the DEIS comment period is made on page 4-149 of the DEIS regarding the establishment of seasonal or construction timing restrictions to minimize impacts. We believe that in both cases (and others throughout the DEIS) the information requested is directly relevant to the assessment of impacts of the project and should have been made available for review in the DEIS. In addition, inherent in the FERC recommendation is the presumption that the coordination between the applicant and the consulting agencies has advanced to a level that there is meaningful information to convey. Based on our recent conversations with NOAA on the two issues, noted above, we are not aware that the necessary coordination has taken place.

We note that on page 4-187 the DEIS states that impacts would be avoided or minimized by "providing specialized equipment that would enhance the identification and locating of protected species, especially the presence of the North Atlantic right whale." The DEIS calls for the submission of information about this equipment prior to construction. We strongly recommend that additional information about the proposed equipment be provided before publication of the FEIS, as noted in the cover letter, and include a discussion of the potential for the use of acoustic monitoring devices as one tool to reduce vessel strike risks to marine mammals. These buoy arrays could provide substantially greater warning time that whales are in an area, as opposed to relying strictly on the "forward-watching" whale spotters. The exact number and location of the arrays should be determined in conjunction with NOAA.

## **Eelgrass**

The DEIS (page 4-95) describes eelgrass as an annual plant in eastern Maine that dies back in the winter. There have been claims of populations of eelgrass completing this life cycle in one growing season; however, an annual form of eelgrass has never been established in the scientific literature. In the winter, plants go into a negative growth phase, i.e., they lose leaves faster than they can replace them, primarily due to reduced light levels. However, the plants continue to photosynthesize and produce carbon even throughout the winter. The newly produced carbon is used preferentially, because it is more energy efficient for the plant to do so than to metabolize carbon reserves from the rhizome. The implication of this strategy is that the plants may be more vulnerable, not less as is implied in the DEIS discussion, to impacts in the winter than at other times of the year due to the reduction in available energy for photosynthesis.



We note that the context for the DEIS discussion of impacts to eelgrass is framed under the assumption that no impacts from normal operations are expected and describes the potential for impacts to portions of eelgrass beds that happen to be exposed at low tide associated with a flash fire from ignition of an LNG vapor cloud. EPA views this avenue for impacts to eelgrass beds as remote.

### **Invasive Species**

The proposed project will require a large number of new pilings to be installed at the pier facility. These pilings represent open surface area that will be colonized by a variety of marine organisms. We recommend that FERC require Downeast LNG to commit to monitoring the encrusting community in several areas among the pilings for invasive species. EPA would be willing to work with FERC and Downeast as part of an interagency team to help develop an appropriate monitoring program for invasive species.

### **Impacts from Blasting for Terminal Construction**

The DEIS reports that no blasting is anticipated for the terminal construction. If blasting ultimately becomes necessary, we would expect that additional coordination with state and federal resource agencies would occur. Blasting can have serious impacts to marine mammals and has been implicated in multiple fish kills in this region.

### **Water Quality/Marine Impacts**

#### National Pollutant Discharge Elimination System (NPDES) Permit Requirements

As we stated in our scoping comments discharges of pollutants from the proposed LNG terminal into Passamaquoddy Bay will be subject to Clean Water Act (CWA) technology standards and the State of Maine's water quality standards (WQSs). Specifically, discharges of toxics or non-toxic, non-conventional pollutants will have to satisfy the CWA's Best Available Technology (CWA-BAT) standard, while discharges of any conventional pollutants subject to CWA technology standards will have to satisfy the CWA's Best Conventional Technology standard (CWA-BCT). Where the permitting authority determines that permit limits more stringent than technology-based limits are necessary to maintain or achieve state WQSs, the permit limits will be based on such WQSs. CWA 301(b)(1)(C), 401. Maine's NPDES permit program (MEPDES) requirements are at Chapters 2, 543, and 520 through 529 of the Department's rules.

ME DEP is authorized to implement all NPDES permitting requirements in the state of Maine's jurisdiction except for requirements under CWA Section 316(b), which governs cooling water intake structures. As such, ME DEP will need to evaluate alternative means of controlling all pollutant discharges from the terminal to determine the MEPDES permit requirements that will satisfy the applicable CWA and state requirements for the necessary permits.

The facility may require various MEPDES permits depending on the final design and operational scheme for the facility. Such permits may include the following:

- a. A Construction General Permit will be required during all proposed construction activities (Section 2.3) as Downeast proposes to clear and grub 47 acres for the facility.
- b. The proposed facility would have an SIC code of 4922 (Natural Gas Transmission) or 4923 (Natural Gas Transmission and Distribution), depending on the final layout and function of the facility. These SIC codes are not included in the Maine Multi-sector General Permit and, therefore, would likely require an individual or alternative permit issued by the ME DEP. The DEIS notes the need for an industrial stormwater permit for the discharge of process wastewater and/or stormwater from the facility and the potential impact to surface water on page 4-61.

#### Vessel Discharges

Pollutant discharges from LNG tankers (and possibly other vessels) associated with the construction and operation of the proposed facility may be covered by EPA's General NPDES Permit for vessels (Vessel General Permit). *See* 73 Fed. Reg. 7947 (Dec. 29, 2008) (Final National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges Incidental to the Normal Operation of a Vessel). The details of any applicable requirements under the Vessel General Permit will need to be determined by the relevant regulatory agencies together with the project proponent and/or the owner or operators of the vessels. The FEIS should identify any pollutant discharges (and water withdrawals) that are expected from vessels associated with the project and should characterize the environmental effect of such discharges (and withdrawals). In particular, thermal impacts due to the discharge of cooling water associated with vessel engine cooling should be described in greater detail. The DEIS documents a 26 square meter plume of water "that would be approximately 1° C or less warmer than ambient conditions"; however, the report does not include detailed model assumptions, calibration, and verification. We request that this information be provided in the FEIS.

#### Stormwater

We note that necessary stormwater infrastructure for the facility should have been included in Section 2.3 as the stormwater management system will be a part of the facility. Section 2.7.1.1 documents that "containment basins would include automatically activated sump pumps to clear rainwater from the spill containment basins", but does not document if this discharge will be permitted under a NPDES permit. We recommend that this information be included in the FEIS.

#### Use of Submerged Combustion Vaporizer (SCV) Water

As described in Section 4.3.2.2 (page 4-62) of the DEIS, FERC recommends Downeast "file a final plan for the discharge of the excess SCV water...". According to the DEIS, Downeast plans to sell surplus SCV water to an independent party for off-site use, which would negate the discharge of approximately 85 gallons per minute (gpm) per unit (total of 3 units; up to 109 gpm during peak capacity) to be regulated under a MEPDES permit. We agree with the call for a final plan for excess SCV water from FERC but believe it should have been provided by Downeast earlier in the environmental review process. The information that should be provided

for review in the FEIS should include discharge location, rate and frequency, and expected environmental impacts and mitigation measures. We recommend that FERC provide a feasibility analysis to provide documentation of the proposed off-site usage. If Downeast is unable to locate an independent party to purchase the approximately 367,200 gallons per day of SCV water (at elevated temperatures as high pressure vaporizers discharge at up to 120°F), it is likely that this water would be regulated under an appropriate state discharge permit.

#### Fire Pump Testing Water

The DEIS explains that approximately 180,000 gallons of water per week will be withdrawn from Passamaquoddy Bay to test emergency firewater pumps. The DEIS explains that the water would be sprayed back into Passamaquoddy Bay. Similar facility fire pump test discharges (Distrigas of Massachusetts LLC, for example) are regulated under their individual NPDES permit after discharge into their storm drain system. As currently described in the DEIS, no MEPDES permit would be required for the intake and discharge. However, the FEIS should document whether a NPDES permit will be necessary for these proposed discharges as a result of any changes to the discharge location.

#### **Air Quality**

##### Emissions

The DEIS notes FERC's request for information from Downeast regarding total emissions from LNG vessel and support vessels traveling between the pilot station and the import terminal berth. We believe this information should have been provided in the DEIS and was specifically requested in our May 3, 2006 scoping comments. We ask FERC to revisit our full suite of scoping comments related to air impacts assessment to help inform the development of the FEIS, and to make the information available prior to the FEIS publication as requested in the cover letter.

##### Diesel Retrofits/Clean Fuels

The DEIS notes EPA's concern for public health impacts from diesel exhaust from construction vehicles and equipment and our recommendation for the use of low sulfur fuel and diesel retrofits. The DEIS indicates that FERC will encourage Downeast to "use new equipment, retrofit existing equipment, and/or use Clean Fuels to reduce diesel emissions." We appreciate FERC's interest in this issue and continue to strongly recommend that these measures be required for the proposed project.

Specifically, we recommend that FERC require Downeast to incorporate contract language that requires the following:

- All Contractor and Sub-contractor diesel powered non-road construction equipment, including generators, with engine horsepower (HP) ratings of 60 HP and above, that are on the project or are assigned to the contract for a period in excess of 30 consecutive calendar days shall be retrofitted with Emission Control Devices and/or use Clean Fuels in order to reduce diesel emissions. In addition, all motor vehicles and/or construction

equipment (both on-highway and non-road) shall comply with all pertinent State and Federal regulations relative to exhaust emission controls and safety.

- The reduction of emissions of carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NOx), and particulate matter (PM10) will be accomplished by installing Retrofit Emission Control Devices or by using less polluting Clean Fuels.
- The Retrofit Emission Control Devices shall consist of oxidation catalysts, or similar retrofit equipment control technology that (1) is included on the Environmental Protection Agency (EPA) Verified Retrofit Technology List and (2) is verified by EPA or certified by the manufacturer to provide a minimum emissions reduction of 20% PM10, 40% CO, and 50% HC.
- The Clean Fuels shall consist of diesel fuel that (1) can be used without engine modification, (2) is certified to provide a minimum emissions reduction of 30% PM10 and 10% NOx when compared to No. 2 Diesel Fuel, and (3) is included on the California Air Research Board (CARB) Verification List.
- Construction shall not proceed until the contractor submits a certified list of the non-road diesel powered construction equipment that will be retrofitted with emission control devices or that will use Clean Fuels. The list shall include (1) the equipment number, type, make, and contractor/sub-contractor name; (2) the emission control device make, model and EPA verification number; and/or (3) the type and source of fuel to be used.
- The contractor shall submit monthly summary reports, updating the same information stated above, and include certified copies of the clean fuel delivery slips for the report time period, noting which vehicles received the fuel. The addition or deletion of non-road diesel equipment shall be included on the monthly report.
- The contractor shall establish truck-staging zones for diesel powered vehicles that are waiting to load or unload material at the contract area. Such zones shall be located where the diesel emissions from the trucks will have minimum impact on abutters and the general public. Idling of delivery and/or dump trucks, or other diesel powered equipment shall not be permitted during periods of non-active use, and must comply with State anti-idling laws.

#### Cumulative Air Impacts

The DEIS (page 4-408) notes a FERC request for a cumulative air quality impact assessment for FERC review and evaluation prior to the end of the DEIS comment period. This analysis should have been presented in the DEIS for review and comment. As noted in the cover letter, we request that this information be made available prior to the publication of the FEIS.

## **Greenhouse Gas Emissions**

The DEIS states that Downeast did not provide emissions estimates for CO<sub>2</sub>, N<sub>2</sub>O, and methane as necessary to quantify greenhouse gas (GHG) emissions. We support the FERC recommendation that in order to allow for a complete determination of the environmental impacts of the project, estimates of GHG emissions associated with the construction and operation of the LNG facility and related pipelines should be provided. We look forward to reviewing the updated analysis, as well as any discussion, as appropriate, of the potential impacts of GHG emissions and potential mitigation measures. EPA also recommends that Downeast review EPA's Natural Gas STAR program, a flexible, voluntary partnership that encourages oil and natural gas companies to adopt proven, cost-effective technologies and practices that improve operational efficiency and reduce methane emissions (see <http://www.epa.gov/gasstar/index.html>.)